ELECTION ASSISTANCE COMMISSION

Summary of Resolutions Passed by Technical Guidelines Development Committee of U. S. Election Assistance Commission at January 18 and 19, 2005 Meeting

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I.   SUMMARY

The Technical Guidelines Development Committee (TGDC) of U. S. Election Assistance Commission (EAC) recently held a meeting in Washington, D.C. As part of that meeting, the TGDC passed several resolutions directing work being done by the National Institute of Standards and Technology (NIST) for the EAC to update and develop federal voting system standards.

At the request of the panel, staff has prepared a short summary of some of the key resolutions passed at that meeting. Many of these resolutions mirror issues that have been identified and/or addressed previously in California.

The resolutions of note fall into five general categories:
1. General Resolutions
2. Security Resolutions
3. VVPAT Resolutions
4. Usability and Accessibility Resolutions
5. Public Information Resolutions

Some of the resolutions have been truncated for the purpose of brevity.

II.   GENERAL RESOLUTIONS

There were four general resolutions passed of note:
1. NIST was directed to do research and develop/update standards based on resolutions from TGDC (01-05)
2. Conformance tests for performance requirements should be based on human performance tests (05-05).
3. All proposed requirements that involve human interaction should address human factors and privacy implications (09-05)
4. Develop a process to de-quality voting systems (32-05).

In particular it should be noted there is not currently a process on the federal level to disqualify a voting system as a system can be decertified on the state level. Resolution 32-05 would start the development of such a process.

III.   SECURITY RESOLUTIONS

There were six security resolutions passed of note:
1. The TGDC concludes that the use of COTS software introduces excessive and unnecessary risk and its use should be minimized (14-05)

2. The TGDC concludes that the manner in which software is loaded onto voting systems is a significant security issue that warrants more stringent controls (15-05).
3. A setup validation method ensures that a voting system contains the authorized software only and is in the proper initial state. Current standards and practice need substantial improvement (16-05)
4. The TGDC directs NIST to research and draft standards documents requiring testing of voting systems that includes open-ended research for vulnerabilities (17-05).
5. The TGDC concludes that proper documentation is critical to the security evaluation of voting systems. Documentation should address system design, architecture, features, controls, operational modes, and should include recommended management, operational and maintenance procedures. It should include all security requirements for operation, including the manual, non-computerized procedures. Processes and procedures that reduce security vulnerabilities through preparation, balloting, counting and audit phases are critical. (18-05)
6. The TGDC concludes that, for now, the use of wireless technology introduces severe risk within voting systems from a security perspective and should be approached with extreme caution (35-05).

These standards could potentially address several of the security issues that have been previously identified by the state (COTS software, software distribution, set-up validation, wireless technology). In addition, these standards may address concerns raised about the lack of open-ended research for vulnerabilities. All of these standards may mitigate against the extent of any State software review deemed necessary to approve a voting system.

IV. __VVPAT RESOLUTION__

There was one VVPAT resolution passed of note:
1. The TGDC divides voting systems into two categories: those (class DV) where each voter is presented a fundamental representation of his ballot that the voter may directly verify, and those (class IV) not in class DV. The TGDC concludes that voting systems in class IV or DV must be held to significantly different security requirements. Need to develop standards to: a) Clarify the distinction between class DV and class IV voting systems, b) Elaborate and define the requirements to be satisfied by class DV and IV voting systems, and c) Review methods of verification accessible by voters with disabilities. (12-05)

These standards could potentially address both the accessibility issues as related to the VVPAT previously discussed by the Panel as well as the need for federal standards for DV (DRE with VVPAT).

V.   <u>USABILITY AND ACCESSIBILITY RESOLUTIONS</u>

There were five usability and accessibility resolutions passed of note:
1. Develop standards for usability and accessibility (02-05)
2. Develop standards for usability, accessibility and privacy that relate both the system used to vote and the environment of the polling place (03-05)
3. Voting systems should ensure the greatest usability and accessibility (06-05)
4. Develop guidelines for instructions, ballot design and error message (08-05)
5. The TGDC concludes that the adoption of standard formats for election-related information, such as ballots, has positive benefits (23-05).

These standards are of note in that they not only call for the development of standards, but that those standards should address issues not only directly related to the voting system design but also to the way that system is used (i.e. ballot layout, environment at the polling place). This would seem to lead towards the development of federal standards similar to California use procedures.

VI.   <u>PUBLIC INFORMATION RESOLUTIONS</u>

There were two public information resolutions passed of note:
1. The TGDC requests NIST draft guidance for how to develop a public set of test methods and procedures (26-05).
2. Qualification test reports should, to the extent possible, be released to the public as evidence that the qualification process was responsibly executed (28-05).

These resolutions are of note as they parallel similar efforts in California to increase the transparency of the voting system approval process.

VII. <u>PUBLIC COMMENT</u>

There was no public meeting notice issued specifically for this item. Therefore, no public comment was received.